

WHAT IS CLAIMED IS:

1. A method of evaluating the reflection performance of a reflecting mirror designed for a vehicle lamp, comprising the steps of:

5 a) entering design information and position information, the design information representing a plurality of reflecting basic surfaces which constitute the reflecting mirror, and the position information containing a light source position in the vehicle lamp; and

10 b) displaying attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a plurality of areas into which one reflecting basic surface selected from among the plurality of reflecting basic  
15 surfaces is divided on the basis of the design information.

2. The method according to claim 1, further comprising the step of:

c) displaying attribute information concerning the attribute with respect to each of a plurality of areas into  
20 which each of the remaining reflecting basic surfaces is divided on the basis of the design information.

3. The method according to claim 1, further comprising the steps of:

d) generating divided area information so as to be  
25 associated with the design information, the divided area information being indicative of a plurality of areas, one

reflecting basic surface selected from among the plurality of reflecting basic surfaces is divided into the plurality of areas on the basis of the design information;

5 e) making determination, on the basis of the divided area information and the design information, as to whether imaginary light from the light source position can effectively reach each of the plurality of areas of the selected reflecting basic surface; and

10 f) generating attribute information concerning the attribute assigned to each of the plurality of areas on the basis of the determination, the attribute information being associated with at least one of the design information and the divided area information.

15 4. The method according to claim 3, further comprising the steps of:

g) applying the step (d) to one reflecting basic surface sequentially selected from the remaining reflecting basic surfaces to update the divided area information, the divided area information being associated with the design information;

20 h) applying the steps (e) and (f) to one reflecting basic surface sequentially selected from the remaining reflecting basic surfaces to update the attribute information, the attribute information being associated with at least one of the design information and the divided area information; and

i) displaying attribute information concerning the attribute with respect to each of the plurality of areas into which each of the remaining reflecting basic surfaces is divided on the basis of the design information.

5           5.       A method according to claim 2, wherein the step (c) includes the steps of:

          providing an evaluation point to each of the plurality of areas;

          generating a straight line, the straight line  
10       connecting the evaluation point to the light source position; and

          making determination as to whether the straight line intersects a reflecting basic surface other than the reflecting basic surface which is associated with the  
15       plurality of areas.

          6.       An evaluation system for evaluating reflection performance of a reflecting mirror designed for a vehicle lamp, comprising:

          a memory;  
20       a display device which displays received information;  
          input means for entering design information and position information on a light source position in the vehicle lamp to store the entered information in the memory, the design information being indicative of a plurality of  
25       reflecting basic surfaces which constitute the reflecting mirror; and

first transmitting means for transmitting, to the display device, attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a plurality of areas, one reflecting basic surface selected from among the reflecting basic surfaces is divided into the plurality of areas on the basis of the design information.

7. The evaluation system according to claim 6, further comprising:

second transmitting means for transmitting attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of the plurality of areas, each of the remaining reflecting basic surfaces is divided into the plurality of areas on the basis of the design information.

8. The evaluation system according to claim 6, further comprising:

first division means for generating divided area information so as to be associated with the design information, the divided area information including area data on a plurality of areas, one reflecting basic surface selected from among the reflecting basic surfaces is divided into the plurality of areas on the basis of the design information;

first determination means for making determination,

on the basis of the divided area information and the design information, as to whether imaginary light from the light source position can effectively reach each area of the selected reflecting basic surface; and

5 first attribute means for generating, on the basis of the determination, attribute information concerning the attribute assigned to each of the plurality of areas, the attribute information being associated with at least one of the design information and the divided area information.

10 9. A computer-readable storage medium storing a program to be executed by a computer, the program enabling the computer to evaluate reflection performance of a reflecting mirror designed for a vehicle lamp, wherein the program includes:

15 an input process provided so as to enter design information and position information of a light source position in the vehicle lamp, the design information being representative of a plurality of reflecting basic surfaces, the plurality of reflecting basic surfaces constituting the reflecting mirror; and

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a first display process provided so as to display attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a plurality of areas, one reflecting basic surface selected from among the plurality

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of reflecting basic surfaces is divided into the plurality

of areas on the basis of the design information.

10. The storage medium according to claim 9, wherein the program further comprises:

5 a second process provided so as to display attribute information concerning an attribute indicative of whether imaginary light from the light source position can effectively reach each of a plurality of areas, each of the remaining reflecting basic surfaces is divided into the plurality of areas on the basis of the design information.

10 11. The storage medium according to claim 9, wherein the program further includes:

15 a first division process provided so as to generate divided area information, the divided area information including area data on a plurality of areas into which one reflecting basic surface selected from among the reflecting basic surfaces is divided on the basis of the design information, the divided area information being associated with the design information;

20 a first determination process provided so as to make determination, on the basis of the divided area information and the design information, as to whether imaginary light from the light source position can effectively reach each area of the selected reflecting basic surface; and

25 a first attribute process provided so as to generate attribute information concerning the attribute assigned to each of the plurality of areas on the basis of the

determination, the attribute information being associated with at least one of the design information and the divided area information.

12. The storage medium according to claim 9,  
5 wherein the program further includes:

a second division process provided so as to generate divided area information, the divided area information including area data on a plurality of areas, each of the reflecting basic surfaces is divided into the plurality of  
10 areas on the basis of the design information, the divided area information being associated with the design information;

a second determination process provided so as to make determination, on the basis of the divided area information and the design information, as to whether imaginary light  
15 from the light source position can effectively reach the plurality of areas of each reflecting basic surface;

a second attribute process provided so as to generate, on the basis of the determination, attribute information concerning the attribute assigned to each of the plurality  
20 of areas of each reflecting basic surface, the attribute information being associated with at least one of the design information and the divided area information; and

a third display process provided so as to display the  
25 attribute information concerning the attribute with respect to each of the plurality of areas into which each

of the remaining reflecting basic surfaces is divided on the basis of the design information.